

## Guarantee

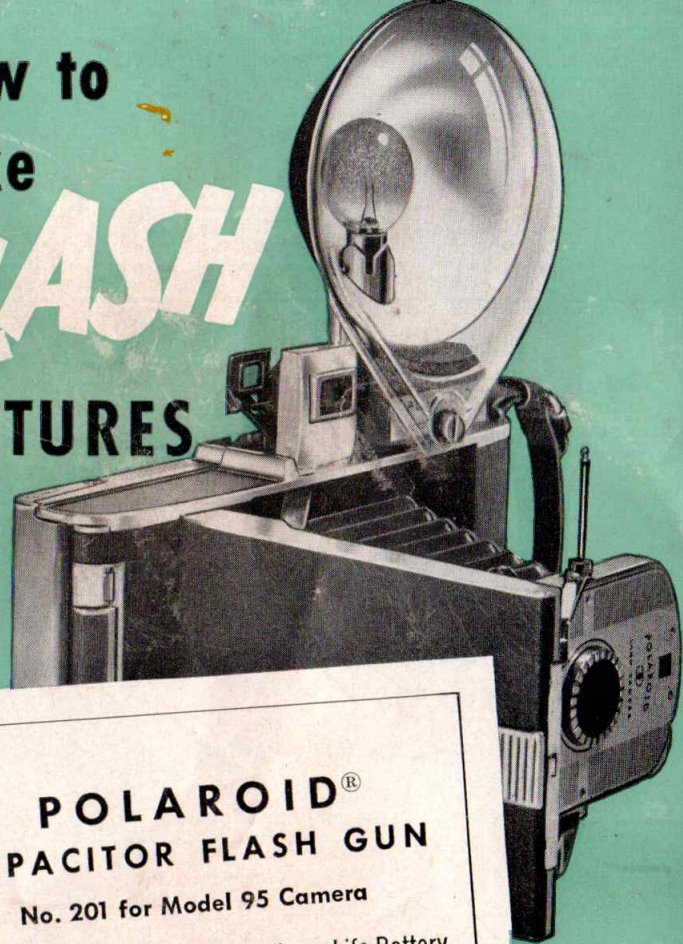
Each Polaroid Flash Gun is carefully tested before it leaves the factory. Exacting Polaroid Corporation standards plus the worldwide reputation of the Kalart Company, pioneer manufacturer of modern flash equipment, provide every assurance of satisfactory performance. Each gun is guaranteed for a period of two years from date of purchase against defects in material or workmanship (battery and capacitor excepted). During this period, any such defects will be remedied without charge (except transportation). Units damaged in use or worn through normal service will be repaired under an appropriate system of charges for labor and parts.

When it finally becomes necessary to replace battery, be sure to use battery specified on diagram inside base compartment. Insert new battery with + and — terminals as shown on diagram.

For other service or repair, return gun to your photographic dealer, or mail prepaid to Kalart, Plainville, Conn. Pack well in stiff box and attach separately-stamped envelope giving your name, address and nature of difficulty.

**POLAROID CORPORATION, Cambridge, Mass.**

## How to Take **FLASH** PICTURES



### **POLAROID® CAPACITOR FLASH GUN**

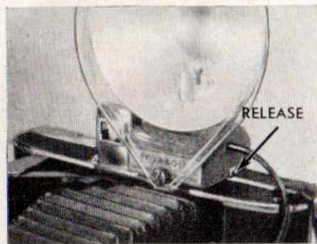
**No. 201 for Model 95 Camera**

**The Sure-fire Flash Gun with the Long-Life Battery**



# How to Use it ...

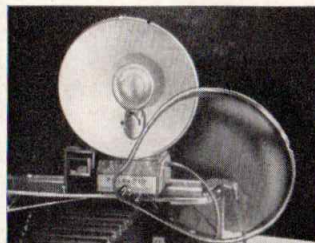
**1 Slip it on the camera.** The shoe on the base of the gun fits into the accessory slide of the camera, just the way the Polaroid-G. E. meter does. Simply push it *all the way in until it locks*. To remove, just press forward on the release lever on the side of the base, as you slide the gun out of the clip.



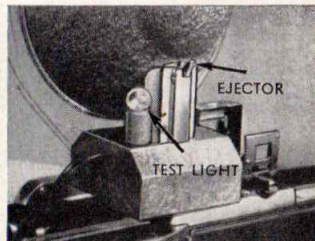
**2 Connect the cord.** Bring cord around the side of the shutter, well away from lens (or underneath bellows as shown) then connect to flash socket. Push in and turn clockwise to lock in position. Push down momentarily on test-bulb behind reflector. This removes any charge on condenser and makes it impossible for bulb to go off in your hand if there should be a short-circuit anywhere in system.



**3 Slide Safety-Shield** to the side to insert bulb. After inserting bulb, slide shield back into place underneath clip on top of reflector. Should bulb shatter, shield is designed to absorb impact by bending forward and deflecting glass away from subject.



**4 Insert flash bulb** by pressing bulb into socket. It will lock in place automatically. Do not try to twist bulb to lock it — there's no need to.



**To check bulb,** press down momentarily on test light. It will flash briefly if bulb is good and extension circuits are complete.

**To eject used bulb,** push up the ejector lever on the rear of the gun. The bulb will pop out automatically. Don't try to pull bulb out of socket without using ejector lever.

**5 Set Shutter,** using flash guide on back of reflector. REMEMBER THAT ACCURATE DISTANCE ESTIMATES ARE IMPORTANT FOR GOOD FLASH PICTURES. Settings given on flash guide may vary slightly depending on reflectivity of surrounding walls.



**Recommended Bulbs.** Your Polaroid Flash Gun uses the *miniature* bulbs made by all flash bulb makers. These come in two types — the gas-filled bulbs that flash very quickly but with relatively less output (SM or SF types) and the wire-filled bulbs (No. 5 or Press 25) that have a slightly longer firing time but give more light. *No. 5 and Press 25 have much greater range with the Polaroid Camera and are recommended for general use at all distances.* SM - SF bulbs can be used at distances of 5 feet or less, which makes them useful for close-up pictures with the Polaroid Close-up Lens Kit. PF3, PF4, and Bantam-8 types give smaller light output than Press 25 and No. 5 but they are quite practical for most pictures. Use a shutter setting 1 or 2 numbers lower than the settings given on the Flash Guide for Press 25 or No. 5.

## SOME TIPS FOR GOOD FLASH PICTURES

**Settings:** Accurate shutter settings depend on accurate distance estimates. With flash, unlike sunlight, the amount of light falling on a subject varies tremendously as you move closer or further away. Use flash guide on back of gun to indicate best shutter setting, remembering that amount of reflection from walls and ceiling may change exposure slightly.

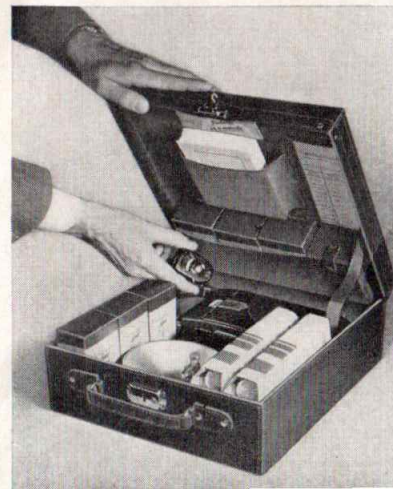
**Backgrounds:** In general, your flash pictures will be more pleasing if you place the subject near an angled background or side wall which *reflects* some of the light from the bulb back onto the subject. This gives some fill-in lighting which helps to avoid a flat picture.

**Close-ups:** For a softer effect, particularly on close-ups of people, place a clean white handkerchief inside shield as shown. Depending on amount of diffusion caused by handkerchief, a shutter setting one number lower may be required.



**Outdoors:** Use flash outdoors in daylight for really excellent pictures. On bright days, flash will fill in shadows in side or edge-lighted pictures. On gray days, flash provides highlight interest that would otherwise be lacking. Although some experimentation is occasionally necessary, in general you can use the same shutter settings you would use for regular outdoor pictures. Move closer or further away depending on amount of fill-in light desired from flash bulb.

**Easy to Carry:** The Polaroid Master Compartment Case is the perfect answer to easy carrying and storage of your camera, flash gun, bulbs, film, meter and other accessories. Lightweight and compact, this handsome case provides you with everything you need for complete Polaroid photography. Flash gun can be left on the camera when put in case.



**IMPORTANT** Measure distance between flash gun and subject carefully.



# Congratulations

... on having bought the most modern of flash guns, using the newest electrical principle and incorporating all of these advanced improvements for perfect performance with your Polaroid Land Camera:

**Long Battery Life.** The special battery in this gun will fire thousands of bulbs, should last one to three years or more without replacement.

**Real Safety.** No chance of faulty circuits causing bulb to go off in your hand. And the safety-shield gives built-in protection from shattered glass should the bulb explode.

**Exclusive Test Light.** Tells whether bulb is good and extension circuits are complete before you shoot. Eliminates mis-fires.

**Multiple Flash.** Connector provided for linking additional bulbs to the same battery.

**Built-in Flash Guide.** You can tell at a glance just what setting to use for each distance. Guides can be changed as new film types appear. Your flash gun will always be up-to-date.

## When to use Flash

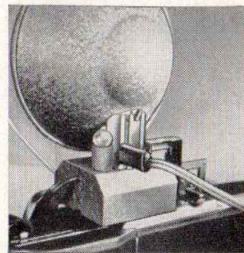
Use your flash gun for any kind of picture whenever the lighting is too dim for a snapshot (the Polaroid-G. E. meter can tell you this) and when a time-exposure is not practical. Because the light from the flash bulb is so intense, ordinary room illumination will not affect exposure, and need not be considered in making shutter settings. You will also want to use flash to "fill in" shadow areas in outdoor pictures taken in bright sunlight (see inside).

## Why a CAPACITOR?

Your gun uses a "capacitor" (or condenser) to store the energy needed to fire the flash bulb. In an ordinary gun, the batteries are connected right to the bulb, and when contact is made, the bulb short-circuits the batteries, draining them of enough energy to fire the bulb. Thus the batteries in an ordinary gun weaken, their short-circuit voltage drops, and they can no longer ignite a bulb.

The capacitor circuit uses a miniature battery of high voltage. When a fresh bulb is placed in the gun, the battery charges the capacitor at a rate which draws very little current from the battery. The capacitor stores this energy and empties it instantaneously into the bulb when contact is made. This rush of energy at reliable voltage is what makes this kind of gun operate so satisfactorily and uniformly. A single battery will fire thousands of bulbs and should last for years.

**Extension Flash.** The greater power of this gun enables it to fire additional bulbs simultaneously, and you can easily plug in extension units for more effective lighting. The battery will fire up to 6 extra bulbs, connected in series. Just as with an ordinary Christmas-tree light string, each extension socket must have a good bulb in it before any will fire. To check circuit after bulbs are inserted, press down on test-light. Wait 2 or 3 seconds and press down again. It will give a brief flash both times if the bulbs and wiring are good. If it does not flash, test bulbs separately. *All bulbs must be of the same type and make.*



Extension Connected